Amendment to the Drawings:

The attached sheet of drawings includes changes to Fig. 1. This sheet replaces the original sheet including Fig. 1 and has been revised to include the label "Prior Art".

Attachment: Replacement Sheet
Annotated Sheet Showing Change

REMARKS/ARGUMENTS

Appreciation is extended to Examiners Levine and Pond for the courtesy of the December 20, 2005, interview with the undersigned and with the applicant and his Australian representative. At the interview, the Examiners were provided with a detailed explanation of the background and advantages of the invention and in particular how the invention as claimed differs from Malnekoff '853 and Rubin '895. The remarks below include the substantive remarks made at the interview.

Although no agreement was reached at the interview, the Examiners agreed to review the application and provide feedback to the undersigned to assist in preparing a response to the Office Action. Although some feedback was provided, Examiner Pond indicated that it would be necessary to file a response to the previous Office Action before any substantive comments or guidance could be provided.

In response to the objection to the drawings, certain of the claims have been amended to change the phrase "three or more of the received objective parameter values" to --at least three of the received objective parameter values--. Since exemplary tables showing the correlation among the objective parameter values of crown angle, pavilion angle and table percentage are provided, it is submitted that the objection to the drawings has been obviated.

In connection with the request by the Examiners to designate Figs. 1-6 as prior art, Fig. 1 has been amended to so designate it. However, Figs. 2-6 are not prior art in that they are representative data tables developed by the inventor to set forth selected correlations among crown angle, pavilion angle and table percentage to produce attributes relating to brilliance, fire, etc. This was discussed at length at the aforementioned interview.

It is submitted that the claims patentably define over the cited prior art. As set forth in Claim 1, a plurality of objective parameter values, which can be, for example, depth percentage, table percentage, crown angle, etc., from a user are input into a computer. These parameter values relate to objective measured physical proportions of the gem stone. The computer then determines values for a plurality of attributes of the gem stone that contribute to visual appeal, such as brilliance, fire, scintillation or diameter spread, these attributes being derived from a combination of at least three of the received objective parameter values and based upon predetermined consumer preferences. Thus, the computer makes the direct transition from measurable, objective parameter values to attributes of visual appeal, and then establishes a rating value of the gem based on said attributes and provides an assessment of the subjective beauty and desirability of the gem stone to the user based upon the rating value and/or the values of the visual appeal attributes. Although the beauty and desirability of a gem stone may ultimately influence its monetary value, the rating values and values of visual appeal attributes assigned in accordance with the present invention are not monetary values, and the invention is not directed towards the establishment or estimation of price. Never

before has this computer implemented process been utilized which process enables ratings and subjective beauty assessments to be provided based solely on interrelated measured physical proportions of the gem stone.

Contrast this with the method of Malnekoff wherein a mixture of objective and subjective inputs such as cut type, weight, color and clarity are used to generate an indexed list price which is then adjusted by a variable jeweler pricing adjustment to generate a baseline price estimate. The baseline price estimate is then adjusted based on other gem stone characteristics, including cut proportions, fluorescence and the identity of the lab generating the gem stone data. Thus, there is not present in Malnekoff the direct conversion of measured physical proportions of the gem stone into visual appeal attribute values. The inventive method does not require an expert to perform the assessment and it is simply a matter of the user plugging in the numbers and reading out the aesthetic values.

Furthermore, the pricing adjustment disclosed by Malnekoff is derived from cut proportions based upon a single cut standard similar to Tolkowsky's ideal cut, which is described in the background section of the present specification. Malnekoff teaches only a negative adjustment (i.e. a downgrading) based upon deviations in one or more individual cut proportions from the so called ideal, when considered independently. This is described in particular in column 5 of Malnekoff, between lines 6 and 22, wherein it is stated that "an ideal depth percentage for a round cut diamond is around 58 percent", that "an ideal table percentage for a round cut diamond is around 56 percent", and that "as the value of the depth percentage or the table percentage of a gem stone varies from the ideal cut the amount of the adjustment will vary in a negative direction." It is thus apparent that Malnekoff makes no attempt to account for the interrelationship between cut proportions in order to assess the gem stone, for example by deriving adjustments from combinations of at least three proportions of the gem stone, as in the present invention.

As discussed at some length during the aforementioned interview, this pricing method of Malnekoff represents an oversimplification, and in any case does not result in the production of a set of separate attribute values relating to aspects of visual appeal, such as brilliance, fire, scintillation and diameter spread. In contrast with Malnekoff's pricing adjustment, variation of one proportion of a gem stone from the chosen "standard" does not necessarily result in a less beautiful stone, if other proportions are also varied in an appropriate manner in order to enhance attributes such as brilliance, fire, scintillation and/or diameter spread. However, according to Malnekoff a diamond having two or more proportions which deviate from the standard in such a manner is not properly assessed for beauty, or even price, but instead is multiply penalized.

The method and system of the present invention instead relies upon an assessment of visual appeal of the gem stone using at least three proportional parameters, to derive values for attributes of the stone based upon predetermined consumer preferences.

While the term "predetermined consumer preferences", as recited in the claims, may appear somewhat subjective, we submit that it is not, and indeed the specification describes in detail the methods by which consumer preferences are established in an objective manner in at least one embodiment. The disclosed process includes the study of actual diamonds and the use of virtual diamond analysis, e.g. by experienced jewelers, to associate attribute values with various combinations of cut proportions, followed by verification including showing actual diamonds with known proportions to numerous observers in various lighting environments.

It is true that the correlative data may be subject to change in accordance with improved understanding of consumer preferences, variations in preference with time or cultural context, and so forth. However, the method of the invention using this data, as claimed, remains invariant. Indeed, as acknowledged by the applicant during the aforementioned interview, ongoing refinements have been made to the data employed by one particular embodiment of the invention over time, without any change in the inventive method or system itself.

We therefore submit that no practical difficulty would be encountered by a person of skill in the art in establishing suitable consumer preferences, and that there is accordingly no ambiguity and/or subjectivity in the terms of the claims, particularly when read in light of the specification as a whole. For the Examiner's further information in this respect, we commend to his attention the on-line embodiment of the present invention available at http://www.pricescope.com/cutadvisor.asp, which demonstrates the ability of the inventive method to provide useful, concrete and meaningful information to users on the basis of appropriately compiled correlative data. Additionally, the page at http://www.pricescope.com/article/20_adjustment.asp describes a particular instance of refinement of the correlative data utilized by a preferred embodiment of the invention based upon the input of various experts in the field.

In a specific implementation of the invention, the correlative data is stored in look-up tables or the like which are indexed by at least three objective parameters relating to physical proportions of the diamond, for example, pavilion angle, crown angle and table percentage.

A further difference over Malnekoff is that in one form thereof the invention generates values for a plurality of visual appeal attributes which can then be accorded numerical weightings, to provide not only individual quantifiable values of brilliance, fire, scintillation and spread, for example, but also a total score based upon a combination of a plurality of such attributes. Malnekoff fails to disclose this.

Furthermore, as recognized by the Examiner, Malnekoff does not disclose an assessment of the subjective beauty and desirability of the gem stone to the user. The Examiner cites Rubin as teaching this, but, as pointed out at the interview, Rubin merely discloses an objective color designation which is unrelated to the aesthetic attractiveness of the gem stone. The purpose of the Rubin method is to enable a color to be characterized in order to provide as good a match as possible when replacing the stone. Accordingly, even if Rubin and Malnekoff are combined, the limitations of Claim 1 are not met and such combination provides nothing more than the disjoint sum of its parts, i.e., a price estimate based on Malnekoff and an objective color designation which is unrelated to aesthetic attractiveness. Claim 1 is therefore not obvious over the combination of Malnekoff and Rubin within the meaning of 35 U.S.C. § 103.

Because independent Claims 8 and 34 include the salient features of amended Claim 1, these claims are also not anticipated or rendered obvious by Malnekoff combined with Rubin for the reasons set forth above.

Claim 3 specifically identifies the attributes contributing to visual appeal as including one or more of brilliance, fire, scintillation and diameter spread. This claim is even further away from the combination of Malnekoff and Rubin than is Claim 1 because it specifically identifies a plurality of the attributes from the measured physical proportions input into the computer as being one or more of brilliance, fire, scintillation and diameter spread. This limitation is neither disclosed nor hinted at in Malnekoff.

New Claim 39 is similar to Claim 1 except that it includes a "markush" group setting forth a list of the objective parameter values and the computer receiving at least three of those values. Claim 39 is narrower than Claim 1 in that it restricts the possible combination of three objective parameter values to those listed in the markush group. This claim is not obvious over Malnekoff combined with Rubin for at least the same reasons as advanced in connection with Claim 1.

The claims set forth a new, inventive and non-obvious method that greatly enhances the ability to provide gem stone assessments without the engagement of an expert and is very different from the method set forth in Malnekoff. Even if Malnekoff and Rubin are combined, the assembled method or apparatus limitations in the independent claims cannot be found. The claimed subject matter is therefore not obvious over the cited prior art under 35 U.S.C. § 103.

It is believed that the application is now in condition for allowance, but if the Examiners believe that certain issues remain or if they have any suggestions regarding clarifying amendments to the claims, it is requested that they contact the undersigned at 260-460-1692.

Respectfully submitted,

John F. Hoffman
Registration No. 26,280

Attorney for Applicants

JFH/nw

BAKER & DANIELS LLP
111 East Wayne Street, Suite 800
Fort Wayne, IN 46802
Telephone: 260-424-8000
Facsimile: 260-460-1700

Enc. Petition for Extension of Time
Check No. 121233 ($60.00)
Return Postcard

CERTIFICATION OF MAILING

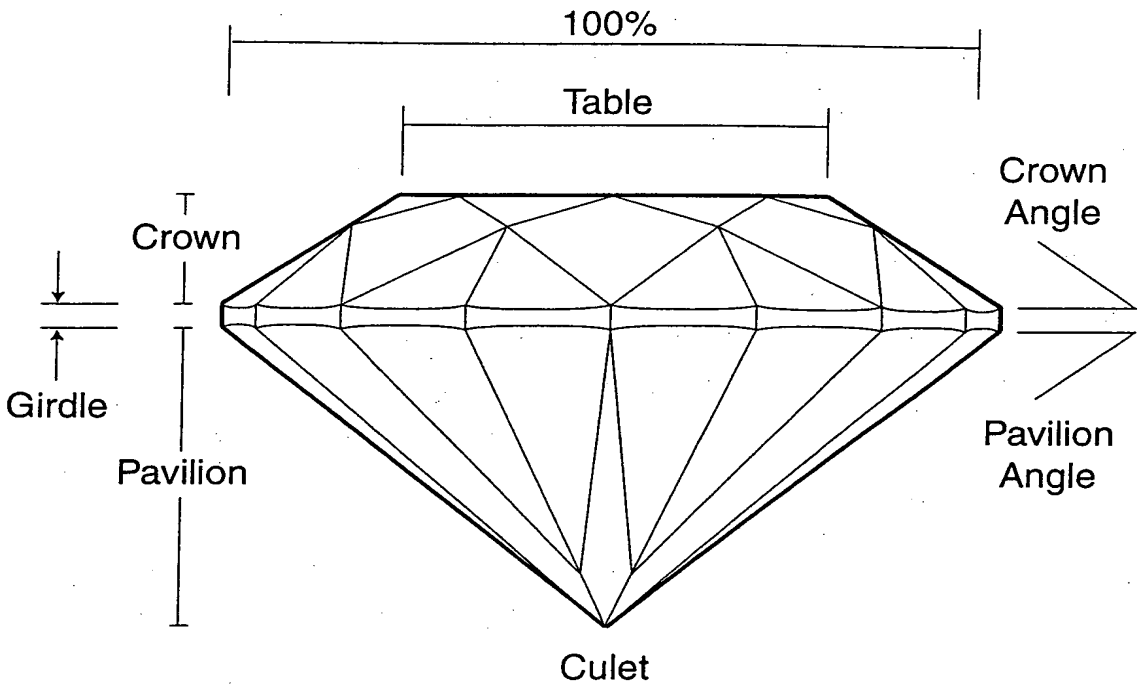
I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: February 17, 2006

JOHN F. HOFFMAN, REG. NO. 26,280
Name of Registered Representative

Signature

February 17, 2006
Date

Fig 1.



PRIOR ART